REMARKS/ARGUMENTS

Status of Claims

Claims 2, 4, and 6-25 stand rejected.

Thus, claims 2, 4, and 6-25 are pending in this patent application.

The Applicant hereby request further examination and reconsideration of the presently claimed application.

Claim Rejections – 35 U.S.C. § 103

Claims 2, 4, 6, 8-15, 17, and 19-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 7,197,556 (*Short '556*) in view of U.S. Patent 7,194,554 (*Short '554*). Claims 7, 16, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Short '556* in view of *Short '554* and U.S. Patent Application Publication 2003/0081625 (*Matsufuru*). Claims 2, 4, and 6-11 depend from independent claim 12, claims 14-18 depend from independent claim 13, and claims 20-25 depend from independent claim 19. Thus, claims 2, 4, and 6-25 stand or fall on the application of the combination of *Short '556* and *Short '554* to independent claims 12, 13, and 19. The United States Supreme Court in *Graham v. John Deere Co. of Kansas City* noted that an obviousness determination begins with a finding that **"the prior art as a whole in one form or anther contains all" of the elements of the claimed invention.** *See Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 22 (U.S. 1966) (emphasis added). The Applicant respectfully asserts that the combination of *Short '556* and *Short '554* fails to disclose all of the elements of independent claims 12, 13, and 19, and consequently fails to render obvious claims 2, 4, and 6-25.

The combination of *Short '556* and *Short '554* fails to render obvious claims 2, 4, and 6-25 because the combination of *Short '556* and *Short '554* fails to disclose setting a first tag

corresponding to each of broadband access devices and a second tag corresponding to each of non-cascading ports in each of the broadband access devices, and when a port receiving a message in a cascading port, transferring the message received from the cascading port, and when a port receiving a message in a non-cascading port, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag. Claims 12, 13, and 19 read:

12. A method for identifying user position, comprising:

setting a first tag corresponding to each of broadband access devices and a second tag corresponding to each of non-cascading ports in each of the broadband access devices, wherein the first tag and the second tag are employed to identify user positions; and wherein:

when a port receiving a message in a broadband access device among the broadband access devices is **a cascading port, transferring the message received from the cascading port**; and **when a port receiving a message in** the broadband access device is **a non-cascading port, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag**; and

when a broadband access server receiving the message carrying the first tag and the second tag from the non-cascading port, identifying, by the broadband access server, user position according to the first tag and the second tag inserted into the message; wherein the broadband access server knows through which broadband access device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag.

13. A broadband access device, comprising:

one or more cascading ports and one or more non-cascading ports, wherein a first tag is provided for identifying the broadband access device, and a second tag is provided for identifying each of the non-cascading ports, and the first tag and the second tag are employed to identify user positions; and

the broadband access device is capable of receiving a message from one of the cascading ports, and transferring the message received from the cascading port;

the broadband access device is capable of receiving a message from one of the non-cascading ports, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag for identifying user position.

19. A system for identifying user position, comprising: a plurality of broadband access devices and a broadband access server, each of the broadband access devices is provided with a first tag, and each of non-cascading ports in the broadband access device is provided with a second tag, and the first tag and the second tag are employed to identify user positions; wherein

a broadband access device among the plurality of broadband access devices is capable of receiving a message from a non-cascading port, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag;

the broadband access server is capable of receiving the message carrying the first tag and the second tag, and identifying the user position according to the first tag and the second tag having been inserted into the message; wherein the broadband access server knows through which broadband access device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag.

(Emphasis added). As shown above, claims 12, 13, and 19 recite that only messages received from a non-cascading port of a broadband access device are tagged, and two kinds of tags (a first tag and a second tag) are inserted into the messages. As to **messages received from a cascading port** of a broadband access device, they are directly transmitted upward **without inserting any of the two kinds of tags**. For example, user 1 uses a terminal device to send message A to a first broadband access device. The port in the first broadband access device that receives message A is called a non-cascading port. Then, two different tags (a first tag that indicates the first

broadband access device and a second tag that indicates the non-cascading port in the first broadband access device) are added into message A. Afterwards, message A may be directly transmitted to a broadband access server, or may be transmitted to a second broadband access device and then sent to the broadband access server via the second broadband access device (that is, **the first and second broadband access devices may be cascaded**). Port 1 in the second broadband access device that receives message A is called a cascading port. Also suppose that user 2 sends message B to port 2 of the second broadband access device. Message B is tagged with a first tag of the second broadband access device and a second tag of port 2 of the second broadband access device. When messages A and B are received by the broadband access server, the broadband access server can know that user 1, which sent message A, accesses the network via a non-cascading port of the first broadband access device, while user 2, which sent message B, is accessed via a non-cascading port of the second broadband access device. As such, although message A has been transmitted through the second broadband access device, the broadband access server will not mistake the position of user 1 since only the tags related to the non-cascading port of the first broadband access device are added into message A.

In contrast, *Short '556* neither: (1) identifies his messages as being cascaded or non-cascaded, nor (2) inserts two tags into any of his packets. Specifically, *Short '556* discloses that "The access concentrator determines the port from which the packet was sent and **assigns** an appropriate **VLAN identification number** to the packet **based upon the port from which it was sent**. As shown in FIG. 4 **each port**, in this example each hotel room **has a unique VLAN ID**." *Short '556*, col. 9, ll. 14-18. Also, *Short '556* discloses "At step 230, **the access concentrator tags the network data packet with a port identifier** that corresponds to the media access control (MAC) address ... Each port in the network service provider's entity is

configured as a virtual LAN and therefore, **each port has its own VLAN identifier**". *Short '556*, col. 11, ll. 37-43. That is, *Short '556's* data packets sent from each port are tagged with a VLAN identifier of the port for identifying the position (e.g. hotel room) from which the data packets are sent **without differentiating whether the port is a cascading port or a non-cascading port** as claims 12, 13, and 19 do. In addition, **only a single port identifier (e.g. a VLAN identifier) is added into the data packets**, while two kinds of tags (a port tag and a device tag) are added into messages in claims 12, 13, and 19. *Short '554* is not cited as disclosing the features missing from claims 12, 13, and 19. As such, the combination of *Short '556* and *Short '554* fails to disclose at least one element of independent claims 12, 13, and 19, and consequently fails to render obvious claim 2, 4, and 6-25.

In addition, the combination of *Short '556* and *Short '554* fails to render obvious claims 2, 4, 6-12, and 19-25 because the combination of *Short '556* and *Short '554* fails to disclose when a broadband access server receiving the message carrying the first tag and the second tag from the non-cascading port, identifying, by the broadband access server, user position according to the first tag and the second tag inserted into the message; wherein the broadband access server knows through which broadband access device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag. Claims 12 and 19 read:

12. A method for identifying user position, comprising:

setting a first tag corresponding to each of broadband access devices and a second tag corresponding to each of non-cascading ports in each of the broadband access devices, wherein the first tag and the second tag are employed to identify user positions; and wherein:

when a port receiving a message in a broadband access device among the broadband access devices is a cascading port, transferring the message received from the cascading port; and when a port receiving a message in the broadband access device is a non-cascading port, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag; and

when a broadband access server receiving the message carrying the first tag and the second tag from the non-cascading port, identifying, by the broadband access server, user position according to the first tag and the second tag inserted into the message; wherein the broadband access server knows through which broadband access device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag.

19. A system for identifying user position, comprising: a plurality of broadband access devices and a broadband access server, each of the broadband access devices is provided with a first tag, and each of non-cascading ports in the broadband access device is provided with a second tag, and the first tag and the second tag are employed to identify user positions; wherein

a broadband access device among the plurality of broadband access devices is capable of receiving a message from a non-cascading port, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag;

the broadband access server is capable of receiving the message carrying the first tag and the second tag, and identifying the user position according to the first tag and the second tag having been inserted into the message; wherein the broadband access server knows through which broadband access device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag.

As shown above, claims 12 and 19 recite that when a broadband access server receiving the message carrying the first tag and the second tag from the non-cascading port, identifying, by the broadband access server, user position according to the first tag and the second tag inserted into the message; wherein the broadband access server knows through which broadband access

device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag. The Examiner admits that *Short '556* fails to disclose the above limitation. *See* July 17, 2009 Office Action, pp. 4-5. Instead, the Examiner relies on *Short '554* to disclose the above limitation. *Short '554* discloses that the his server examines the packet to determine **the identity of the source**, wherein the source is e.g. a particular user, computer. *See, e.g. Short '554*, col. 3, ll. 16-18. The attributes contained in the packet, such as the source IP address, source port and source MAC address, are used for determining whether the source has access rights, wherein the access rights define the rights of the source to access the network. *See, e.g. Short '554*, col. 3, ll. 18-26. That is, *Short '554's* attributes contained in the packet are used by server for deciding whether the source (i.e. a user terminal) is admitted to access the network. Therefore, *Short '554* does not disclose the broadband access server identifies "user position according to the first tag and the second tag inserted into the message," wherein the first tag is a device tag and the second tag is a port tag of the device (not a source). Moreover, the benefit of the present application claimed in claim 12 is not for selectively controlling host access to the network but for transferring user position information to the network when having insufficient VLAN ID. *See* the specification, ¶ 11. In other words, the first tag and the second tag carried in the message inserted by the broadband access device are obtained by a broadband access server for learning the position where the user terminal sending out the message accesses the network. These two kinds of tags are used by the broadband access server to identify user position of a user that is connected to a broadband access device via a non-cascading port. As such, the combination of *Short '556* and *Short '554* fails to disclose at least one element of independent claims 12 and 19, and consequently fails to render obvious claim 2, 4, 6-12, and 19-25.

Non-Final Next Office Action

The Applicant would like to point out that the claims 2, 4, 6, and 8-25 are not currently amended. In addition, the Applicant would like to remind the Examiner of the rules regarding finality of office actions. Specifically, MPEP § 706.07(a) states that the next office action should not be final if the Examiner changes the grounds of rejection for any of claims 2, 4, 6, and 8-25. Should the Examiner insist on making the next office action final, the Applicant requests a telephone conference with the Examiner and the Supervisory Patent Examiner to clarify the finality issue, and thereby potentially avoid a petition under 37 C.F.R. § 1.181.

CONCLUSION

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by the Applicant. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Final Office Action dated July 17, 2009 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account Number 50-1515 of Conley Rose, P.C., Texas. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,
CONLEY ROSE, P.C.

Date: 9/4/09

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